

4. Implementation



Chapter 4

Implementation

4.1 Introduction

Development of this plan by the Regional Climate Protection Authority (RCPA) and its member governments is another step in Sonoma County's ongoing local climate leadership. Coordinated efforts to translate this leadership into action are essential to realize the greenhouse gas (GHG) reductions and community co-benefits identified in Chapter 3.

This chapter describes five core elements of plan implementation:

1. Coordinating implementation across many entities
2. Securing funding and facilitating financing for plan implementation
3. Engaging the community and encouraging broad participation
4. Monitoring and reporting on progress
5. Adaptively managing plan implementation and updates

In this discussion of implementation it is important to acknowledge the regional, multi-jurisdictional nature of Climate Action 2020 (CA2020). While RCPA has led the development of CA2020 and will remain in that leadership role through implementation, specific details about implementation of the local GHG reduction measures will be determined by the city (and town) councils and the County Board of Supervisors. City- and county-level implementation will need to reflect local conditions and priorities and additional input from the local community. Therefore, the local measures in CA2020 may be implemented in different ways in different jurisdictions. The cities and the County are committed to the local GHG reduction measures they have identified in CA2020, including a commitment to develop the necessary implementation details to achieve key progress indicators, with support from RCPA and others.

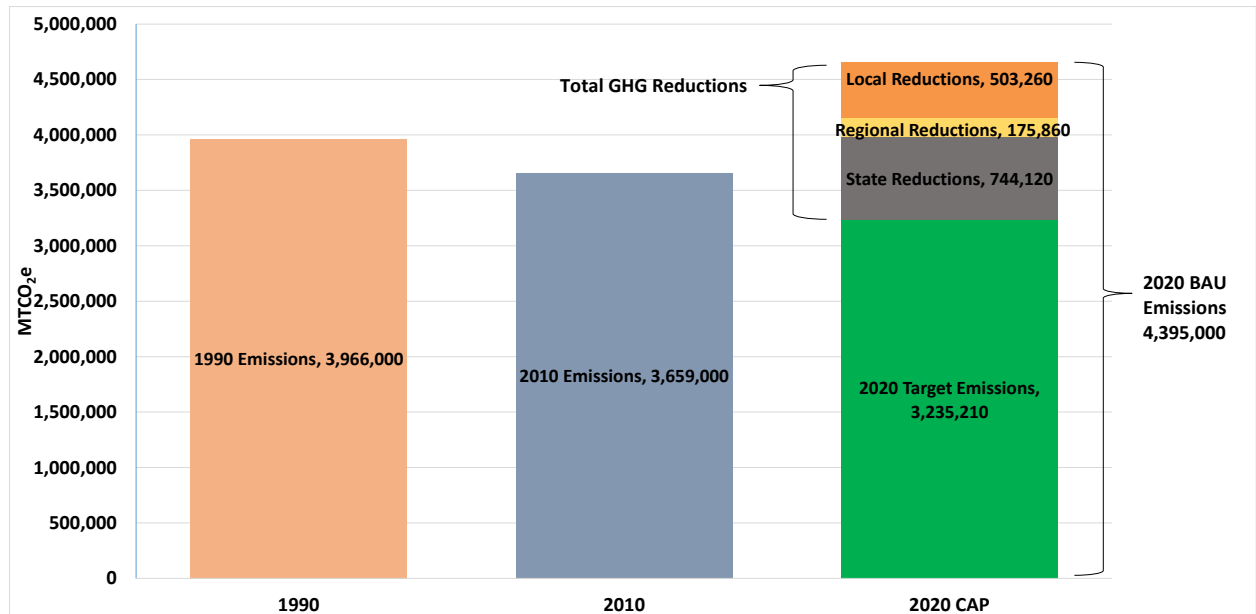
As noted elsewhere in CA2020, the City of Santa Rosa adopted its community CAP in 2012. The City will continue to implement the measures in its plan and those measures will contribute to regional (countywide) GHG reductions.

4.2 Coordinated Implementation

If ever an issue called for coordinated, multi-partner effort, it is climate change; progress depends on communities working together. CA2020 reflects an innovative, collaborative approach to responding to climate change across multiple local communities. By working together, Sonoma County's jurisdictions can achieve greater GHG reductions, and do it more efficiently than if each jurisdiction acted on its own.

CA2020 includes a regional (countywide) goal that will be achieved through the combined impact of local, regional, and state measures implemented in a coordinated manner as a comprehensive GHG emissions-reduction program. With the local commitments identified in this CAP for implementation by 2020, Sonoma County will achieve its regional target of 25% below 1990 levels and be well on the way toward a long-term goal of 80% below 1990 levels by 2050 (Figure 4-1).

Figure 4-1. Countywide 1990, 2010, and 2020 GHG Emissions; 2020 State and Local Reductions



CA2020 commits local governments to implementing a suite of measures appropriate for each community based on their prior efforts, development and economic trends, and community priorities. In Chapter 3, 39 GHG reduction measures are identified that are unique to local government authorities and from which RCPA member jurisdictions have selected. Specific commitments are outlined by jurisdiction in Chapter 5.

Success in achieving CA2020 goals will also rely on GHG reduction measures implemented by state and regional entities that can provide services and resources on behalf of *all* communities more efficiently than individual jurisdictions on their own. These state and regional measures, most of which are already in place or underway, are a critical part of CA2020 and provide a foundation from which local measures can build. State and regional measures are also outlined in Chapter 3.

4.2.1 The Role of RCPA

RCPA is a local government agency created in 2009 to coordinate a regional response to climate change. It is overseen by a Board of elected officials from each of the nine cities and the county, the same Board that oversees the Sonoma County Transportation Authority (SCTA). RCPA builds from SCTA capacity to support, expand, and replicate successful programs already underway at member jurisdictions and partner agencies, and to fill gaps in local climate response. The regional

structure provided by RCPA helps ensure that all jurisdictions participate in achieving the countywide GHG reduction goals.

RCPA led development of this plan and is committed to its implementation by securing funding, managing pilots and programs, developing research and best practices, and supporting members and regional partners in coordinated implementation. Principles that drive collaboration are embedded in RCPA's approach.

- **Consistency:** Policies and programs developed and deployed through regional collaboration minimize gaps in service so all residents benefit from climate action. Inter-jurisdiction consistency also creates more transparency for residents and businesses in the county.
- **Efficiency:** By pooling resources the jurisdictions of Sonoma County are able to aggregate and align human and financial resources, across partners large and small.
- **Integration:** Collaborative structures bring individual agency or community efforts together for a common purpose, aligning related projects toward common goals.
- **Multi-benefit impact:** When agencies work toward a shared vision, both common and distinct goals are served; success is more likely with more invested partners.

The RCPA Board provides a venue for local governments in Sonoma County to participate in establishing priorities, and to direct RCPA staff in the implementation of pilots and programs. The Board oversees climate action programs that serve the entire county, including those offered by the Bay Area Regional Energy Network, long range planning including CA2020, the Shift Sonoma County transportation plan, the Climate Ready North Bay vulnerability assessment, and community engagement related to climate change, such as the Sonoma County Climate Adaptation Forums.

To carry out the priorities of the Board, RCPA staff work with staff from member agencies to develop and manage programs to the benefit of the entire county. Staff collaboration includes a Staff Working Group (SWG) used to develop CA2020. The SWG will continue to provide ongoing coordination of CA2020 implementation. RCPA staff also support individual jurisdictions and agency partners to integrate the implementation of specific programs into a cohesive strategy.

As the lead agency, RCPA will adopt CA2020 first (including certification of the Environmental Impact Report). Following adoption by RCPA, each city and the County will adopt its portion of CA2020 (see Chapter 5) in a form appropriate to that jurisdiction. Once adopted, the cities, county, and regional agencies will implement the measures each has committed to in their respective CA2020 adoption processes.

In 2014, RCPA was identified by the White House as one of 16 local government Climate Action Champions from around the United States, in recognition of the successes achieved via the collaborative model in place in Sonoma County.



RCPA will coordinate and facilitate implementation actions by aggregating funding opportunities to leverage federal, state, and regional grants; providing technical assistance to local partners; developing shared tools (such as case studies, model policy language, and new development consistency checklists); promoting inter-jurisdiction efficiencies through communication and collaboration; and promoting accountability for CAP implementation through measurement and reporting.

RCPA will also directly implement certain measures on behalf of its members as it has since its inception. Examples include Windsor Efficiency Pay As You Save, Energy Upgrade California, Climate Ready North Bay, and Shift Sonoma County.

4.2.2 The Role of RCPA Members

While the coordinating role of RCPA is critical, the ambitious countywide GHG reduction target cannot be achieved without strong leadership and commitment to action from RCPA member jurisdictions. RCPA can help ensure that the actions of individual jurisdictions are greater than the sum of its parts, but local action is essential.

As a part of the implementation process, each jurisdiction will participate in the CA2020 SWG and may also identify additional staff as needed to bring specific expertise to the CA2020 implementation effort. Each jurisdiction's SWG representative will be responsible for participating in RCPA efforts to support implementation, and for organizing, monitoring, and reporting on implementation in their community. RCPA will provide as many resources as possible on behalf of SWG members in order to maximize efficiency.

SWG members will also coordinate and lead the implementation of measures specific to their communities, with the support from RCPA and one another. Local governments will also use CA2020 as a tool to communicate and solidify their priorities within their communities.

RCPA member jurisdictions will continue to pool resources essential to the success of RCPA, staff participation in coordination meetings and processes (such as data collection and status reporting), collaboration on grant applications, and active participation in other aspects of plan implementation. Given the breadth of measures, success will require engagement from key departments that oversee different GHG reduction strategies such as planning, engineering, public works, fleet management, facilities management, police, fire and emergency services, and parks and recreation.

The regional approach to CA2020 recognizes that the cost of implementation would be higher if each jurisdiction developed and implemented measures on their own. RCPA staff contributions can help ensure that city- or county-specific investments can be most efficient and effective, and leveraged across multiple local governments.

As noted elsewhere, the City of Santa Rosa adopted its own CAP in 2012. The City will continue to implement the measures in its plan and may coordinate and collaborate with RCPA and other cities throughout the implementation process.

4.2.3 The Role of Regional Entities

RCPA is not the only local agency that provides services and support to communities in reducing GHG emissions and preparing for climate change. CA2020 also includes GHG reduction measures that will be implemented by agencies under local governance that provide services and resources on behalf of *all* (or multiple) jurisdictions more efficiently than the individual communities can on their own, especially the smaller cities.

These regional measures are a critical part of CA2020 (as outlined in Chapter 3). Other local public agencies are also already working regionally to advance local climate action goals in support of CA2020, including the following.

- **Northern Sonoma County Air Pollution Control District (NSCAPCD)** is the regional agency responsible for developing and implementing air quality plans for the northern part of Sonoma County. NSCAPCD also sponsors various air quality programs that can support implementation of several energy-efficiency, transportation, and renewable energy strategies.
- **Sonoma Clean Power (SCP)** is the community choice aggregator in Sonoma County and will be the lead for expanding participation rates over time and increasing the renewable portfolio for electricity generated to serve the county. SCP may also offer incentives and rebate programs to encourage energy efficiency, distributed and community-scale renewable energy, and use of electric vehicles.
- **Sonoma County Agricultural Preservation and Open Space District** permanently protects the diverse agricultural, natural resource, and scenic open space lands of Sonoma County for future generations. Conserving and improving the management of natural and working landscapes reduces net GHG emissions and delivers multiple other benefits. A healthy forest, for instance, sequesters carbon while also storing and filtering water, providing habitat for wildlife, and building resilience to climate change.
- **Sonoma County Energy Independence Office:** The County's Energy and Sustainability Division was created in 2006 to promote and deliver solutions necessary to mitigate environmental impacts and prepare for climate change. As the community-facing office of the Energy and Sustainability Division of the County of Sonoma, the Energy Independence Office serves as a community clearinghouse of information, tools, services, programs, and resources for the general public, contractors, and other public entities engaged in pursuing energy efficiency, water conservation, and renewable energy. It also manages the PACE programs throughout the County. Although the office is part of the County of Sonoma, it provides services countywide and is therefore listed among the regional agencies.
- **Sonoma County Waste Management Agency (SCWMA):** Sonoma County jurisdictions (except Petaluma) contract all solid waste collection and recycling services through SCWMA. The jurisdictions will work with the collection agency to increase waste reduction, recycling, and composting, consistent with the solid waste measures in CA2020. The cities/County and SCWMA may also be able to share facilities, programs, and incentives to help ensure that waste diversion goals are achieved by 2020.

- **Sonoma County Transportation Authority (SCTA):** To implement the local transportation strategies fully, collaboration with regional transportation agencies is necessary. It is essential that the cities, the County, SCTA, and the various transit agencies establish a shared vision for how transportation and land use planning can support sustainable growth. SCTA's Comprehensive Transportation Plan is the primary platform for coordinated, countywide planning for transportation measures.
- **Sonoma County Water Agency (SCWA)** is the primary water wholesaler in the county. SCWA has been implementing numerous measures to reduce the carbon footprint of providing water and integrating renewable energy into its system. SCWA also operates several water conservation and educational programs. The jurisdictions can work with SCWA to promote water conservation in the future.

Essentially, there are already many partners with tools in place and underway to achieve GHG reductions. This plan leverages those tools and encourages their use at larger scales.

4.2.4 The Role of the Community

As described in Chapter 1, CA2020 was developed with extensive community input and builds on earlier community-based efforts to address climate change, such as the Community Climate Action Plan developed by the Center for Climate Protection (formerly the Climate Protection Campaign). Continued community involvement is no less important for implementation of CA2020, particularly given that many strategies depend on voluntary commitment, creativity, and participation.

In addition to the individual actions that Sonoma County residents and businesses can take to reduce their own carbon footprint (see Chapter 1, Section 1.3.3), community members will also participate in the public process at individual cities and the County to help shape the details of local measure implementation. Support from the community will be essential to this local decision-making process if Sonoma County is going to achieve its ambitious GHG reduction target. Local non-governmental organizations will likewise play a key role in this process, not only supporting the local implementation actions, but also providing key expertise to inform CA2020 implementation and ongoing adaptive management.

The community—including residents, businesses, and non-governmental organizations—will also play an important role in holding local governmental entities accountable for successful plan implementation. RCPA and local government partners are committed to transparent reporting and implementation and to collaborating with local businesses, community groups, residents, developers, and property owners to establish partnerships and encourage active involvement in CA2020. However, as with most governmental initiatives, that commitment will only be successful if the community reciprocates with active engagement and participation in CA2020 implementation.

4.2.5 Implementation Strategy

RCPA will coordinate with the SWG to accomplish the following general implementation steps:

- **Develop Implementation Plans for Each Emissions-reduction Measure.** RCPA will develop implementation plans that will include milestones, deadlines, funding opportunities, partners, programs, and other details, as necessary, to support implementation.
- **Estimate Project-Specific Costs.** The estimated costs/savings for certain emissions-reduction strategies are provided in Appendix C, *Reduction Measure Methods*. Wherever possible, RCPA will develop more detailed project-specific costs and savings estimates to provide a more accurate assessment of up-front costs and potential returns to communities.
- **Review New Development for Consistency with the Plan.** As described in Chapter 1, meeting the countywide GHG reduction target for 2020 requires new development to be consistent with climate goals by implementing measures that will minimize new GHG emissions. To accomplish this, RCPA member agencies will use the checklist in Appendix A to determine future project consistency with the applicable measures CA2020.
- **Draft Ordinances and/or Codes.** RCPA will support efforts of member agencies to amend their municipal codes where needed to implement certain emissions-reduction measures. Implementation tools may include examples from existing models in other communities, draft policy or model code language, and working with member agency staff to address questions and opportunities for consistency.
- **Establish Partnerships.** Some of the emissions-reduction measures will require new program partnerships that will be internal to each jurisdiction, among the participating communities, and with external agencies.
- **Pursue Funding Sources and Facilitate Investment in Solutions at Scale.** RCPA will lead and support the pursuit of funding from state and federal agencies to support the implementation of emissions-reduction measures. RCPA will also pursue strategies to expand private investment in climate solutions. RCPA member jurisdictions will continue to participate in RCPA-led grant efforts, but will also consider internal funding sources such as facility master plan programs, enterprise budgets, and capital improvement programs.
- **Create Monitoring/Tracking Processes and Indicators.** RCPA will lead emissions tracking and monitoring of program progress, particularly to identify and remedy shortfalls or ineffective programs.
- **Engage the Community and Stakeholders.** RCPA and partners will engage and educate the public and stakeholder groups regarding the implementation of emissions-reduction measures.
- **Lobby for State and Federal Action.** RCPA and partners will identify and lobby for state and federal actions that are supportive of local and regional climate actions.

The specific steps for implementing CA2020 measures will vary, but an illustration of how the RCPA will support member jurisdictions is provided in Table 4.2-1.

Table 4.2-1 – Sample process for RCPA supported implementation of local measures

Implementation Process: Measure 2-L1 Solar in New Residential Development	Responsible Party
Research current status of solar energy requirements in jurisdictions	RCPA
Assemble examples of solar installation requirements for new residential buildings are identified and researched	RCPA
Convene ad hoc solar and building industry meeting to discuss current and potential future practice	RCPA
Develop draft measure tool materials (background information, cost estimates, case studies, resources, best practices, FAQs, incentives & rebates) and model policy language	RCPA
Present draft measure tool materials and model policy language to Staff Working Group (SWG)	RCPA
Review and comment on draft measure tool materials and model policy language	SWG
Refine measure tool materials and model policy language based on feedback and further research as needed	RCPA
Assemble and deliver customized final measure tool materials, including a draft model policy and supporting analysis to be used in jurisdiction staff reports to propose measure implementation	RCPA
Provide direction on jurisdiction specific requirements	Individual Jurisdictions
Refine model policy to reflect jurisdiction specific needs and opportunities	SWG
Adopt requirements for solar energy installation	Individual Jurisdictions

4.2.6 Implementation Schedule

Implementation of the emissions-reduction strategies will occur following adoption of CA2020 to ensure that all measures are in place as planned by 2020. RCPA and member agencies will initially pursue strategies based on the grouping outlined below and summarized in Figure 4-2.

- Group 1 strategies are those that need to be developed early and/or require long lead times to achieve reduction targets by 2020.
- Group 2 strategies are those that do not need to be online immediately but need time for development to meet 2020 reduction targets.
- Group 3 strategies are those that need only to be online by 2020 and can be started later in the decade.

These groupings were proposed based on expected GHG reductions, cost and availability of funding, co-benefits, consistency with existing programs, implementation effort, and the timing necessary to support meeting the 2020 target. However, measures may be implemented in a different order depending on funding or policy opportunities.

Figure 4-2. Implementation Timeline for the GHG Reduction Measures

2016	2016	2017-2018	2019	2019-2020	Post-2020
<ul style="list-style-type: none"> • Adopt the CAP • Identify funding mechanisms 	<ul style="list-style-type: none"> • Implement Group 1 strategies • Develop protocols for monitoring, reporting, and responding to CAP progress 	<ul style="list-style-type: none"> • Implement Group 2 strategies • Update emissions inventories • Examine CAP progress 	<ul style="list-style-type: none"> • Implement Group 3 strategies 	<ul style="list-style-type: none"> • Update emissions inventories • Examine CAP progress • Consider post-2020 targets 	<ul style="list-style-type: none"> • Update emissions inventories • Report on CAP success • Adopt post-2020 targets

Implementation of the individual emissions-reduction strategies will be led by the specific city/County divisions shown in Table 4.2-2, with support from RCPA and other local agency staff as appropriate. Other regional entities (e.g., SCP) will be responsible for implementing regional measures and may also support local measures. The primary entities responsible for implementation of each measure are also shown in Table 4.2-2.

Table 4.2-2. Implementation Timeline for the GHG Reduction Measures

Measure	Responsible Entities
Group 1 – Continuation or start of implementation, 2016	
Regional Measures	
1-R1. Community Energy Efficiency Retrofits for Existing Buildings	Sonoma County Energy Independence Program, RCPA, Sonoma Clean Power (SCP)
1-C2. Expand Community Energy Efficiency Retrofits Program	Sonoma County Energy Independence Program, RCPA, SCP
2-C1. Community Choice Aggregation	Sonoma Clean Power
5-C1. Improve and Increase Transit Service	Sonoma County Transportation Authority, Sonoma County Transit, Petaluma Transit, and Santa Rosa City Bus
5-C2. Supporting Transit Measures	SCTA, Sonoma County Transit, Petaluma Transit, and Santa Rosa City Bus
5-C3. Sonoma-Marin Area Rail Transit (SMART)	SMART and local jurisdictions with SMART stations
9-C1. Waste Diversion Goal	Sonoma County Waste Management Authority with cooperation from RCPA and local jurisdictions
14-C1. Sonoma County Water Agency Carbon-Free Water by 2015	SCWA, supported by local jurisdictions
17-C1. Conserve Open Space and Working Lands	Sonoma County Agricultural Preservation and Open Space District working with other agencies (including cities and the County) and non-governmental partners
18-C1. Sustainable Agriculture Certification Programs	Winemakers/winegrowers, the County
18-C2. Promote the Sale of Local, Sustainable, and Organically Grown Foods and/or Products	Farmers, ranchers, cities/County
19-C1. Rangeland Carbon Farming	Farmers, ranchers, the County
Local Measures	
1-L1. Expand the Green Building Ordinance Energy Code	Windsor
1-L2. Outdoor Lighting	Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor, the County
1-L3. Shade Tree Planting	Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor, the County
1-L4. Co-Generation Facilities	Petaluma and the County
2-L1. Solar in New Residential Development	Pacific Gas & Electric (PG&E), SCP, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Windsor

Measure	Responsible Entities
2-L2. Solar in Existing Residential Buildings	PG&E, SCP, Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor, the County
2-L3. Solar in New Nonresidential Developments	PG&E, SCP, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Windsor
2-L4. Solar in Existing Nonresidential Buildings	PG&E, SCP, Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Windsor, the County
4-L1. Mixed-Use Development in City Centers and along Transit Corridors	Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor, the County
4-L2. Increase Transit Accessibility	SCTA, Sonoma County Transit, Petaluma Transit, Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor
4-L3. Supporting Land Use Measures	SCTA, Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor, the County
4-L4. Affordable Housing Linked to Transit	SCTA, Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor
5-L1. Local Transportation Demand Management (TDM) Program	SCTA, Sonoma County Transit, Petaluma Transit, Cloverdale, Cotati, Healdsburg, Rohnert Park, Sebastopol, the County
5-L2. Carpool Incentives and Ride-Sharing Program	SCTA, Sonoma County Transit, Petaluma Transit, Cloverdale, Cotati, Healdsburg, Rohnert Park, Sebastopol, the County
5-L3. Guaranteed Ride Home	SCTA, Sonoma County Transit, Petaluma Transit, Cloverdale, Cotati, Sebastopol, the County
5-L4. Supporting Bicycle/ Pedestrian Measures	SCTA, Sonoma County Transit, Petaluma Transit, Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor, the County
5-L5. Traffic Calming	SCTA, Sonoma County Transit, Petaluma Transit, Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor, the County
9-L1. Create Construction and Demolition Reuse and Recycling Ordinance	Sonoma County Waste Management Authority (SCWMA), Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor, the County
14-L1. Green Energy for Water Production and Wastewater Processing in Healdsburg and Cloverdale	Healdsburg, Cloverdale

Measure	Responsible Entities
Group 2 – Implementation to start by 2018	
Regional Measures	
3-C1. Stationary Fuel Switching Incentives	SCP, Sonoma County Energy Independence Office, RCPA, Bay Area Air Quality Management District (BAAQMD), NSCAPCD
7-C1. Shift Sonoma County (Electric Vehicles)	SCP, Sonoma County Energy Independence Office, RCPA, BAAQMD, NSCAPCD
7-C2. Alternative Fuels for Transit Vehicles	SCTA, Sonoma County Transit, Petaluma Transit, and Santa Rosa City Bus
5-C4. Trip Reduction Ordinance (TRO)	SCTA, transit agencies, cities/County
5-C5. Supporting Measures for the Transportation Demand Management (TDM) Program	SCTA, transit agencies, cities/County
5-C6. Reduced Cost Transit Passes	SCTA, Sonoma County Transit, Petaluma Transit, and Santa Rosa City Bus
5-C7. Alternative Travel Marketing and Optimize Online Service	SCTA, Sonoma County Transit, Petaluma Transit, and Santa Rosa City Bus
5-C8. Safe Routes to School	SCTA, cities/County
5-C9. Car-sharing Program	SCTA, cities/County
5-C10. Bike Sharing Program	SCTA, cities/County
10-C1. Increase Landfill Methane Capture and Use for Energy	SCWMA, landfill owners/operators
11-C1. Countywide Water Conservation Support and Incentives	SCWA, supported by local jurisdictions
12-C1. Recycled Water	Water/wastewater service providers
13-C1. Infrastructure and Water Supply Improvements	SCWA, other water/wastewater service providers
Local Measures	
3-L1. Convert to Electric Water Heating	Pacific Gas & Electric, SCP, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Windsor
7-L1. Electric Vehicle Charging Station Program	Pacific Gas & Electric, SCP, NSCAPCD, BAAQMD, Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor, the County
On-Road-3. Neighborhood/Site Enhancement Strategies	Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor, the County
5-L6. Parking Policies	Cloverdale, Healdsburg, Sebastopol, the County

Measure	Responsible Entities
5-L7. Supporting Parking Policy Measures	Cloverdale, Cotati, Healdsburg, Petaluma, Sebastopol, Sonoma, Windsor, the County
8-L1. Idling Ordinance	Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, the County
11-L1. SB X7-7 – Water Conservation Act of 2009	SCWA, Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Sonoma, Windsor, the County
11-L2. Water Conservation for New Construction	SCWA, Petaluma, Rohnert Park, Sebastopol, Windsor
11-L3. Water Conservation for Existing Buildings	SCWA, Petaluma, Rohnert Park, Sebastopol, Windsor
12-L1. Greywater Use	SCWA, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, Windsor, the County
Group 3 – Implementation to start by end 2019	
Regional Measures	
13-C2. Wastewater Treatment Equipment Efficiency	Wastewater service providers: Cloverdale, Healdsburg, Petaluma, Santa Rosa, Windsor, Sonoma County Water Agency
18-C3. Urban Agriculture	Cities/County
20-C1. Measure and Track Consumption-based Emissions	Farmers, ranchers, RCPA, the County
20-C2. Educate Consumers	Farmers, ranchers, RCPA, the County
20-C3. Encourage Sustainable Consumption	Farmers, ranchers, RCPA, the County
20-C4. Reduce carbon intensity of product supply chains	Farmers, ranchers, RCPA, the County
Local Measures	
7-L2. Electrify Construction Equipment	BAAQMD, NSCAPCD, Cotati, Healdsburg, Petaluma, Sebastopol, Windsor
8-L2. Idling Ordinance for Construction Equipment	BAAQMD, NSCAPCD, Petaluma, Rohnert Park, Sebastopol, , the County

4.3 Funding and Financing

4.3.1 Plan Implementation Costs and Benefits

Responding to climate change will require public and private investment (costs). These costs are at least partially offset through direct economic benefits (like lower fuel cost) and through avoidance of future costs associated with unmitigated climate change impacts. Most GHG reduction measures in this CAP have a net positive economic result where savings exceed costs, especially in the long term.

Local governments will incur some costs by taking a leading role in responding to climate change. Costs will include staff time, community engagement, and direct investment for some measures (e.g., municipal infrastructure, energy purchases, and program administration).

The private sector – residents and businesses – will also incur costs associated with the implementation of this plan, mainly due to individual choices about how to participate in climate mitigation. Examples include costs to retrofit buildings and equipment, purchase new vehicles, install rooftop solar, or provide employee commute programs.

Public and private entities will also benefit financially by implementing climate action strategies. For many climate action measures, the financial benefits exceed the costs and generate a positive return on investment. These benefits can include reduced fuel, utility, and maintenance costs, higher property values, tax incentives, and rebates. There are many less direct benefits that are more difficult to evaluate financially including employee recruitment and retention, marketing and branding, building occupant health and productivity, and the other co-benefits introduced in Chapter 3.

Of course, looking exclusively at the traditional economic bottom line is insufficient when it comes to climate change. The full value of co-benefits derived from an individual measure is very difficult to quantify. Even more challenging, the full social cost of inaction is impossible to quantify for an individual community. As Chapter 6 illustrates, climate change is generating local impacts with real economic implications. Flooding, fire, drought, and heat will create many economic risks: damage to buildings and infrastructure, impacts to human health and safety, rising health care and emergency services costs, pressure on food and water supply, rising energy costs, and unpredictable agricultural productivity.

Assessing specific measure costs and benefits – to the extent possible – will be an important step in implementing this climate action plan. It will be equally important to acknowledge that there are costs, benefits, challenges, and opportunities associated with mitigating and adapting to climate change, but they are costs and challenges that local and regional agencies can confidently confront head on, knowing that they are essential to the long-term economic well-being and safety of communities.

In confronting the costs of climate action, the RCPA and local governments will work to minimize costs and maximize local economic benefits by pursuing funding for implementation and facilitating financing tools to support regional investment.

4.3.2 Government Funding Strategies

Implementation of CA2020 will require considerable investment from multiple entities. RCPA will continue to strive for an overall funding approach that ensures that the emissions-reduction strategies will be funded and implemented efficiently and quickly by:

- Pursuing funding for strategies concurrently, whenever possible, to use funds most efficiently
- Leveraging federal, state, and regional grants and other funding sources
- Partnering with other communities and regional entities to administer joint programs, and partnering with the private sector on measure implementation
- Reducing barriers to private investment in climate solutions and supporting strategies to direct investments in energy, buildings, transportation, water, and other sectors toward low-carbon options
- Seeking long-term strategies to increase the amount of funding available for local climate action

Various funding options are available to support RCPA and local governments with implementation of emissions-reduction strategies. These options can provide initial capital, reduce overall program costs, and support long-term measure implementation. Appendix D provides information on specific funding and financing options that are currently available to the jurisdictions and that RCPA will pursue to support implementation.

Local jurisdictions are able to obtain funding from the California cap-and-trade program to support certain GHG emissions-reduction measures in CA2020. RCPA is continually monitoring the availability of funding from the sale of cap-and-trade proceeds and the applicability to local GHG emissions-reduction measures along with other sources that may be in development.

4.3.3 Private Sector Financing

Implementation of the emissions-reduction measures in CA2020 will result in costs *and* savings for residents, businesses, and other members of the community (please refer to Appendix C for a cost-effectiveness analysis for certain measures). In fact, most measures have a net positive economic result where savings exceed costs, especially in the long term. Financing tools can help offset the up-front costs of some cost-effective measures. An important role for RCPA and member agencies will be to facilitate sound investments in GHG reduction strategies that will maximize the overall economic return for residents, businesses, and the communities themselves.

For voluntary CA2020 measures (such as energy efficiency and solar retrofits for existing buildings), the private sector will incur associated costs and savings only for those strategies they choose to implement. Some of the measures, however, will be mandatory and will impose costs

on public and private parties. The private-sector incentives and rebates identified in Chapter 3 and Appendix D can significantly improve the economics of individual projects. It is also important to note that the entity making the up-front investment may not be the same one that realizes the savings. For example, developers may invest in energy efficiency measures during construction, but it is the subsequent homeowners who will receive lower utility bills (although, with better energy disclosure requirements, buyers may be willing to pay more for an energy-efficient home).

4.4 Community Engagement

To help facilitate the community involvement described in Section 4.2.4, periodic public updates will provide information and inform each community regarding progress toward attaining the countywide 2020 emissions reduction target. These updates will provide opportunities for collaboration and an opportunity for the cities and the County to receive feedback on potential improvements or changes to the emissions-reduction measures. Other outreach activities, including online and social media, community presentations, event participation, and other strategies, will also be pursued to engage the public and solicit input, suggestions, and participation.

4.5 Evaluation and Monitoring

Regular monitoring is important to ensure that programs are functioning as they were originally intended and the desired GHG reduction outcome is achieved. Early identification of effective strategies and potential issues will help the jurisdictions adapt and make informed decisions regarding priorities, funding, and scheduling.

RCPA will lead periodic updates of countywide emissions inventories and provide an annual report to document progress. The first inventory update will occur in 2016 based on data for calendar year 2015. Future inventory updates will be completed in 2018 and 2020 to inform further refinements to near- and long-term climate action strategies. These updated inventories will be presented to the RCPA Board and provided to the public in the annual report. SWG members will present the information to their governing boards. These updates are essential to understanding how successful existing efforts have been in reducing emissions, and how to further prioritize actions included in CA2020.

RCPA will also develop key program indicators that track specific reduction measures to evaluate how well local government strategies are working. To streamline this effort, RCPA will develop a custom tool to track the progress of the GHG reduction measures. This tool will contain the GHG reduction measures along with metrics, checklists, benchmarks, timelines, goals, key performance indicators, and other items identified by the RCPA Board and its member agencies as essential to the monitoring process.

4.6 Adaptive Management

4.6.1 Learning from What Works and What Doesn't

Despite substantial progress in the past decade, climate action planning is still in its relative infancy. Technology, behavior, and mandates are constantly changing and not every new idea works as planned. Therefore, where program tracking, inventory updates, or other information indicates that the emissions-reduction measures are not being implemented or are not as effective as originally anticipated, RCPA and SWG will adaptively manage CA2020. The goal of adaptive management is to identify and correct ineffective measures quickly, make necessary corrections, and stay on track toward the countywide GHG reduction target.

To do so, in addition to the monitoring described in the previous section, RCPA will conduct a 2-year review of overall CA2020 effectiveness as part of its annual reporting in 2018. The review will include measure status and impact data and will allow for mid-course adjustments prior to 2020. Possible tools for communicating these results to the community include RCPA website dashboards and other tools that support local government reporting such as the Statewide Energy Efficiency Collaborative ClearPath tool and existing community social media accounts.

4.6.2 Implementation Beyond 2020

CA2020 is critical local step toward a long-term future with drastically lower GHG emissions. The jurisdictions of Sonoma County are on the leading edge of promoting lower GHG emissions by pursuing a target of 25% below 1990 levels by 2020. This target is consistent with (and far exceeds) the goals and milestones outlined in Assembly Bill 32. Nonetheless, as 2020 approaches, statewide focus will shift to emissions reductions beyond 2020. This trend has been observed elsewhere through the United States, with New York City recently releasing a plan to reduce GHG emissions to 80% below 1990 levels by 2050. California Executive Order S-03-05, issued in 2005, articulates a similar long-term goal for the state. California Executive Order B-30-15, issued in April 2015, establishes an interim goal for the state to reduce GHG emissions to 40% below 1990 levels by 2030.

CA2020 includes long-term goals consistent with those identified in the Executive Orders. Furthermore, the measures implemented by 2020 as part of this CAP put the county on a trajectory to meet these longer-term goals, and CA2020 measures will be the foundation for future climate action planning.

As noted in Chapter 3, a new phase of climate action planning will be needed after 2020 to expand and build upon the goals and strategies in CA2020 and take advantage of new technologies and climate protection science that are constantly evolving. RCPA and Sonoma County jurisdictions will need to develop plans for the future that build on the measures put in place under CA2020. The region will also most likely rely on further state and federal action to achieve post-2020 targets.